

Jacob, Rebecca (ASRC)

362 495

**From:** STIC-ILL  
**Sent:** Friday, February 08, 2002 3:56 PM  
**To:** Jacob, Rebecca (ASRC)  
**Subject:** FW: 09680471

-----Original Message-----

**Fr m:** Mellerson, Kendra  
**Sent:** Friday, February 08, 2002 3:55 PM  
**T :** STIC-ILL  
**Subject:** FW: 09680471

RECEIVED  
FEB 11 2002  
STIC-ILL

-----Original Message-----

**Fr m:** Gakh, Yelena  
**Sent:** Friday, February 08, 2002 3:27 PM  
**T :** STIC-EIC1700  
**Subject:** 09680471

Kendra, please make it URGENT (if possible):

ACCESSION NUMBER: 1983:191869 CAPLUS  
DOCUMENT NUMBER: 98:191869

TITLE: A rapid and simple assay for the study of thromboxane B<sub>2</sub> synthesis by intact human platelets  
AUTHOR(S): Margotat, Alain; Sampol, Jose; Hawthorn, Dominique; Dumas, Dominique; Leone, Monique

CORPORATE SOURCE: Lab. Biochim. Med., INSERM, Marseille, 13385, Fr.  
SOURCE: **J. Pharmacol. Methods** (1983), 9(1), 63-70  
CODEN: JPMED9; ISSN: 0160-5402

Thanks,

Yelena

---

Yelena G. Gakh, Ph.D.

Patent Examiner  
USPTO, cp3/6D-33  
(703)306-5906

FILE 'CAPLUS' ENTERED AT 15:01:51 ON 30 JAN 2002

L1 0 S SYNTHE (5W) TLC  
L2 2 S SYNTHE? (5W) TCL  
L3 123 S SYNTHE? (6W) TLC  
L4 83 S SYNTHE? (4W) TLC

L4 ANSWER 1 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Chromatographic monitoring of (3-oxy-1-adamantyl)methyl ketone and  
2-adamantylidene cyanoacetophenone synthesis

L4 ANSWER 2 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Determination of 4-chloro-3,5-dimethylphenol in antiseptics and synthetic  
products by scanning thin-layer chromatography

L4 ANSWER 3 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Brain perfusion developer 99mTcN(CHDT)2 and its preparation

L4 ANSWER 4 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Poly(A) polymerase from Escherichia coli adenylylates the 3'-hydroxyl  
residue of nucleosides, nucleoside 5'-phosphates and  
nucleoside(5')oligophospho(5')nucleosides (NpnN)

L4 ANSWER 5 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Synthetic routes to ferroelectric liquid crystal polymers. FLC copolyacrylates

L4 ANSWER 6 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Synthesis and evaluation of affinity adsorbents for glycoproteins: an artificial lectin

L4 ANSWER 7 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Process monitoring of the synthesis of N-dichloroacetylloxazolidine by thin-layer  
chromatography

L4 ANSWER 8 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI TLC determination of 3,3-ethylenedioxy-5.alpha.,10.alpha. (and -5.beta.,10.beta.-)  
epoxy-.delta.9(11)-estrene-17.alpha.-(1-propynyl)- 17.beta.-hydroxyl two intermediate  
isomers in synthesis of antiprogestrone RU 486

L4 ANSWER 9 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Determination of intermediates in naproxen synthesis by TLC

L4 ANSWER 10 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Determination of intermediates in synthesis of midecamycin acetate by TLC method

L4 ANSWER 11 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Increased tumorigenicity and invasiveness of C6 rat glioma cells  
transfected with the human .alpha.-2,8 sialyltransferase cDNA

L4 ANSWER 12 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Application of TLC-MALDI/TOFMS to identification of unknown mixtures  
produced in an organic synthetic process

L4 ANSWER 13 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Gene synthesis, bacterial expression and purification of the Rickettsia  
prowazekii ATP/ADP translocase

L4 ANSWER 14 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Identification of Hg<sup>2+</sup> and its separation from UO<sup>2+</sup> and Fe<sup>3+</sup> on  
impregnated silica gel layers by use of formic acid-sodium chloride mobile phases

L4 ANSWER 15 OF 83 CAPLUS COPYRIGHT 2002 ACS

- TI Thin-layer chromatographic study of the synthesis of some unsaturated chlorotriazine derivatives with herbicidal activity  
L4 ANSWER 16 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Colorimetric determination of silver in synthetically prepared ores with preliminary separation from associated metal ions by thin-layer chromatography  
L4 ANSWER 17 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Polycolumn plates for TLC  
L4 ANSWER 18 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI A simple method for discriminating between natural indigo dyeing and synthetic indigo dyeing by means of TLC  
L4 ANSWER 19 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Nipasol synthesis under microwave and TLC analysis research  
L4 ANSWER 20 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI The preparation of a fluorescent dye: a microscale TLC experiment  
L4 ANSWER 21 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Determination of the enantiomeric purity of commercial L-[U-14C]valine: an experiment utilizing reversed-phase thin-layer chromatography and liquid scintillation counting  
L4 ANSWER 22 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI TLC determination of production yield of 4-hydroxybenzoates in their synthetic products  
L4 ANSWER 23 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Lipofuscin in the retina: quantitative assay for an unprecedented autofluorescent compound (pyridinium bis-retinoid, A2-E) of ocular age pigment  
L4 ANSWER 24 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI A rapid non-isotope assay for 2',5'-oligoadenylate synthetase  
L4 ANSWER 25 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Synthesis of 2,6-dibenzoyl-3,5-distyryl benzo[1,2-b:5,4-b']difurans under phase transfer catalysis conditions.  
L4 ANSWER 26 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Synthesis of 4-(4'-phenyl pyrazol-4'-yl)-3-(2'-thienyl)-2h-[1]-benzopyran-2-ones under phase transfer catalysis conditions.  
L4 ANSWER 27 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Radioimmunological and chromatographic properties of tyrosine methyl ester conjugates with stereoisomeric steroid carboxy derivatives  
L4 ANSWER 28 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Study of the de novo synthesis of cholesterol in the rat liver: a newly developed radiotracer technique, "TLC-autoradioluminography"  
L4 ANSWER 29 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Stereospecific intramolecular cyclization for asymmetric synthesis of (Rp)- and (Sp)-enantiomers of 2-octyl- and 2-phenyl-4H-1,3,2-benzodioxaphosphorin 2-oxides  
L4 ANSWER 30 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Occurrence and in vitro biosynthesis of 11-ketotestosterone in Siberian sturgeon, *Acipenser baeri* Brandt maturing females  
L4 ANSWER 31 OF 83 CAPLUS COPYRIGHT 2002 ACS

- TI Development of a simple folylpolyglutamate synthetase assay in tissues and cell lines.  
L4 ANSWER 32 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Synthesis and properties of N4-hexadecyl-2'-deoxycytidyl-(3'-5')-5-ethyl-2'-deoxyuridine and 2'-deoxythymidyl-(3'-5')-N4-hexadecyl-1-.beta.-D-arabinofuranosylcytosine, two representatives of a new kind of prodrugs  
L4 ANSWER 33 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Biochemical characterization of the interaction of lipid phosphoric acids with human platelets: comparison with platelet activating factor  
L4 ANSWER 34 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Computer-assisted optimization of HPTLC separations of mixtures of unknown composition using UV spectra  
L4 ANSWER 35 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Studies in the chemical constituents of flowers of Mangifera indica.  
Part-II. Isolation and characterization of some alkylgallates from blossoms of Mangifera indica  
L4 ANSWER 36 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Robotic thin layer chromatography instrument for synthetic chemistry  
L4 ANSWER 37 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Nucleotides. Part XXXVIII. Syntheses and characterization of phosphorothioate analogs of (2'-5')adenylate dimer and trimer and their 5'-O-monophosphates  
L4 ANSWER 38 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Application of chromatographic technique in separation and purification of some stereoisomers  
L4 ANSWER 39 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Quantitative analysis of a chloroquinoline ethenyl phenyl derivative using thin layers impregnated with di-p-tolyl tartaric acid  
L4 ANSWER 40 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Effect of the organic support on chromatographic retention  
L4 ANSWER 41 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Highly accelerated reactions in a microwave oven: synthesis of heterocycles  
L4 ANSWER 42 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Identification of bicyclic bisureas and by-products from their synthesis by thin-layer chromatography  
L4 ANSWER 43 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI The chemical structure and the mutagenicity of emodin metabolites  
L4 ANSWER 44 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Determination of additive levels in aviation and turbine oils  
L4 ANSWER 45 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Studies on the stoichiometry of estrogen oxidation catalyzed by purified prostaglandin-H-synthase holoenzyme  
L4 ANSWER 46 OF 83 CAPLUS COPYRIGHT 2002 ACS
- TI Synthesis of leukotriene B and other conjugated triene lipoxygenase products by blood cells of the rainbow trout, *Salmo gairdneri*

L4 ANSWER 47 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Inhibition of aflatoxin production by several insecticides

L4 ANSWER 48 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Thin-layer chromatographic determination of the content of impurities in mebicar

L4 ANSWER 49 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Formation of ortho-phenylphenol glutathione conjugates in the rat liver

L4 ANSWER 50 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Synthesis and characterization of N-parinaroyl ganglioside GM1. Effect of cholera toxin binding on fluorescence anisotropy in model membranes

L4 ANSWER 51 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Quantitative determination of piroxicam and its impurities by HPTLC spectrodensitometry

L4 ANSWER 52 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Analytical profile of dizatrinone, a new analgesic drug

L4 ANSWER 53 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI An integrated first-year laboratory experiment involving synthesis, spectroscopy, and chromatography of metal acetylacetones

L4 ANSWER 54 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Stability of diethylammonium salt of 2,5-dihydroxybenzenesulfonic acid in solution

L4 ANSWER 55 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Thin-layer chromatography of amine antioxidants and antiozonants used in elastomers

L4 ANSWER 56 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Qualitative analysis of synthetic colorings in food

L4 ANSWER 57 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Determination of free sulfur in vulcanized rubber by thin layer scanning method

L4 ANSWER 58 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Determination of caprolactam by adsorptive voltammetry after separation by thin-layer chromatography

L4 ANSWER 59 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Determination of intermediate (cyclic product) of pirenzepine by TLC-UV spectrophotometry

L4 ANSWER 60 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Preparation and determination of ursodeoxycholic acid and its epimer by TLC

L4 ANSWER 61 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Calcium-dependent and calcium-independent histamine release from mast cells induced by active components of compound 48/80

L4 ANSWER 62 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Correlation between TLC parameters and chemical structure of hydrophobic alpha.-amino acids

L4 ANSWER 63 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Mechanism for leukotriene C4 stimulation of chloride transport in cornea

L4 ANSWER 64 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Insulin effects on apolipoprotein B lipoprotein synthesis and secretion by primary cultures of rat hepatocytes

- L4 ANSWER 65 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Physicochemical properties and stability of 3-phenoxybenzyl  
2-(4-ethoxyphenyl)-2-methylpropyl ether (ethofenprox)  
L4 ANSWER 66 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Histamine release induced from mast cells by active components of compound 48/80  
L4 ANSWER 67 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Analytical properties of the isomeric oximes derivated from the  
2-amino-5-chlorobenzophenone. I. Synthesis, separation by thin-layer  
chromatography, and qualitative behavior  
L4 ANSWER 68 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Problems of the study of rubber traces from a forensic standpoint  
L4 ANSWER 69 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Determination of vanillin in synthetic vanilla extract  
L4 ANSWER 70 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Inhibition of thromboxane A<sub>2</sub> synthesis in human platelets by coagulation factor Xa  
L4 ANSWER 71 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Simple, sensitive technique for detection and separation of halogenated  
synthetic pyrethrins by thin layer chromatography  
L4 ANSWER 72 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Rapid method for the determination of malthene and asphaltene content in  
bitumen, heavy oils, and synthetic fuels by pyrolysis TLC  
L4 ANSWER 73 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Immunoreactive somatostatin in two pulmonate gastropods  
L4 ANSWER 74 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Structural and functional differences in pineal and hypothalamic  
luteinizing hormone-releasing hormone  
L4 ANSWER 75 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Bromopride: metabolism and urinary elimination in dogs  
L4 ANSWER 76 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Rapid characterization by thin-layer chromatography of amino acid and  
peptide derivatives enzymically prepared during protease-mediated peptide synthesis  
L4 ANSWER 77 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Quantitative determination of thromboxane synthesis in blood samples by  
video-densitometry  
L4 ANSWER 78 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Thin-layer chromatography of dyes extracted from polyester, nylon and  
poly(acrylonitrile) fibers  
L4 ANSWER 79 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI The mechanism of the inhibitory effect of proteinase inhibitors on  
platelet aggregation and cellular synthesis of prostaglandins. I. The  
effect on the release of arachidonic acid from phospholipids  
L4 ANSWER 80 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Synthesis, characterization and TLC-fluorescence  
analysis of the fluoresceins from dicarboxylic acids  
L4 ANSWER 81 OF 83 CAPLUS COPYRIGHT 2002 ACS  
TI Identification of the main metabolite of ethylenethiourea in mice

L4 ANSWER 82 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Identification of oral hypoglycemic and diuretic drugs by TLC [thin-layer chromatography] using metal ions

L4 ANSWER 83 OF 83 CAPLUS COPYRIGHT 2002 ACS

TI Natural occurrence of 3.beta.,7.alpha.-dihydroxychol-4-en-24-oic acid in hen bile

=> d l4 ibib abs 7, 9, 12, 15, 19, 20, 24, 28, 36, 41, 42, 48, 53, 57, 77, 80

L4 ANSWER 7 OF 83 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:618937 CAPLUS

DOCUMENT NUMBER: 133:233894

TITLE: Process monitoring of the synthesis of N-dichloroacetylloxazolidine by thin-layer chromatography

AUTHOR(S): Ye, Fei; Lan, Xiao-xia

CORPORATE SOURCE: Northeastern Agricultural University, Harbin, 150030, Peop. Rep. China

SOURCE: Sepu (2000), 18(4), 374-375

CODEN: SEPUER; ISSN: 1000-8713

PUBLISHER: Kexue Chubanshe

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB A TLC procedure has been developed for the monitoring and identification of the synthesis of N-dichloroacetylloxazolidine by dichloroacetyl chloride, an alcoholamine and a ketone. The detn. of reaction was made on the plates at room temp. The reaction liq. was spotted on the silica gel G thin-layer plate and developed using solvent system, dichloromethane-methanol (10:1, V/V), until the solvent front migrated 10 cm from the starting spot. Then, the sepd. spots (raw materials and product) were scanned in iodine. About 1 h, the raw material spots disappeared gradually and the product spots became clear, then the reaction had basically completed. Compds. A, B, C and D had Rf values of 0.71, 0.76, 0.75 and 0.79 resp. The repeatability of Rf value was good. The TLC procedure has also been developed for the identification of the recrystn. of crude product. After recrystn., ther was one spot on the plate. Then, the products were confirmed by IR, 1H NMR and elemental anal. The sepn. conditions were easily obtained. This method is simple, rapid, sensitive and reproducible.

L4 ANSWER 9 OF 83 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:409249 CAPLUS

DOCUMENT NUMBER: 133:98856

TITLE: Determination of intermediates in naproxen synthesis by TLC

AUTHOR(S): Dong, Xianmin; Hu, Aixi; Fan, Guozhi

CORPORATE SOURCE: Hunan University, Changsha, 410082, Peop. Rep. China

SOURCE: Hunan Huagong (1999), 29(6), 59-60

CODEN: HHUAFT; ISSN: 1005-8435

PUBLISHER: Hunan Huagong Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB Ten intermediates in the synthesis of naproxen were analyzed qual. by TLC with the mixt. of Et acetate and cyclohexane as a developing agent. The method was used to detn. of the reaction degree of propionylation, bromination and ketalization in the synthesis of naproxen with satisfied results.

L4 ANSWER 12 OF 83 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:590949 CAPLUS

DOCUMENT NUMBER: 131:266341

TITLE: Application of TLC-MALDI/TOFMS to identification of unknown mixtures produced in an organic synthetic process

AUTHOR(S): Matsumoto, Kozo; Habaue, Shigeki; Ajiro, Hiroharu; Okamoto, Yoshio

CORPORATE SOURCE: Department of Applied Chemistry, Graduate School of Engineering, Nagoya University, Nagoya, 464-8603, Japan

SOURCE: J. Mass Spectrom. Soc. Jpn. (1999), 47(4), 274-280

CODEN: JMSJEY; ISSN: 1340-8097

PUBLISHER: Nippon Shitsuryo Bunseki Gakkai

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A TLC-MALDI/TOFMS system is developed for rapid identification of compds.

in a mixt. produced in an org. synthetic chem. Styrene oligomer was used

as a test sample for obtaining the optimum exptl. conditions. This system

may be applied successfully to rapid identification of a new synthesized compd.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE

L4 ANSWER 15 OF 83 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:399276 CAPLUS

DOCUMENT NUMBER: 131:28881

TITLE: Thin-layer chromatographic study of the synthesis of some unsaturated chlorotriazine derivatives with herbicidal activity

AUTHOR(S): Neicheva, A.; Bogdanova, A.; Konstantinova, T.

CORPORATE SOURCE: Department of Analytical Chemistry, Higher Institute of Food and Flavor Industry, Plovdiv, 4000, Bulg.

SOURCE: J. Planar Chromatogr.--Mod. TLC (1999), 12(2), 145-149

CODEN: JPCTE5; ISSN: 0933-4173

PUBLISHER: Research Institute for Medicinal Plants

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Sixty compds., representing chlorotriazine deriv. herbicides and their synthesis intermediates were sepd. by TLC on Silica Gel 60 F254, using 14 mobile phases. RF values are tabulated.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE

L4 ANSWER 19 OF 83 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:813739 CAPLUS

DOCUMENT NUMBER: 130:139142  
TITLE: Nipasol synthesis under microwave and TLC analysis research.  
AUTHOR(S): Liu, ZhongDong; Mo, LuYuan; Li, YongHong; Zhu, Yu  
CORPORATE SOURCE: Zhengzhou Grain College, Zhengzhou, 450052, Peop. Rep. China  
SOURCE: Huaxue Fanying Gongcheng Yu Gongyi (1998), 14(4), 436-440  
CODEN: HFGGEU; ISSN: 1001-7631  
PUBLISHER: Zhejiangsheng Chuban Duiwai Maoyi Gongsi  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese  
AB The synthesis of Nipasol under microwave was studied in this work. The influences of reaction time, mol. structure and the distribution of microwave field on the yields were studied. The anal. method of Nipasol yields by TLC was also researched.

L4 ANSWER 20 OF 83 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1998:809137 CAPLUS  
DOCUMENT NUMBER: 130:222719  
TITLE: The preparation of a fluorescent dye: a microscale TLC experiment  
AUTHOR(S): Calimente, Daniel S.; Strand, Shannon M.; Chang, Shao-Chieh; Lewis, David E.  
CORPORATE SOURCE: Department Chemistry Biochemistry, South Dakota State University, Brookings, SD, 57007-0896, USA  
SOURCE: J. Chem. Educ. (1999), 76(1), 82-83  
CODEN: JCEDA8; ISSN: 0021-9584  
PUBLISHER: Division of Chemical Education of the American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The authors present a new TLC expt based on the synthesis of a fluorescent dye that allows students to monitor the progress of a reaction by TLC.  
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES

L4 ANSWER 24 OF 83 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1997:687814 CAPLUS  
DOCUMENT NUMBER: 128:11300  
TITLE: A rapid non-isotope assay for 2',5'-oligoadenylate synthetase  
AUTHOR(S): Feng, Yun-Feng; Yang, Kai-Yu  
CORPORATE SOURCE: Academia Sinica, Institute Microbiology, Beijing, 100080, Peop. Rep. China  
SOURCE: Shengwu Huaxue Zazhi (1997), 13(4), 428-431  
CODEN: SHZAE4; ISSN: 1000-8543  
PUBLISHER: Zhongguo Shengwu Huaxue Yu Fenzi Shengwu Xuehui  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese  
AB A new non-isotope assay for 2',5'-oligoadenylate synthetase (2',5'-OASE) was developed. The reaction mixt. treated by hexokinase was applied to a

PEI-cellulose thin layer chromatog. plate directly, the products ADP and 2',5'-dideoxy-oligo-adenylate could be sepd. after the plate was soaked and pre-developed in methanol and developed in 0.75 mol/L KH<sub>2</sub>PO<sub>4</sub> (pH 3.5). Deviation analyses and 2',5'-OASE assay suggested that this method can be used for crude or partially purified enzyme assay, esp. for clin. anal.

L4 ANSWER 28 OF 83 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:965626 CAPLUS

DOCUMENT NUMBER: 124:25175

TITLE: Study of the de novo synthesis of cholesterol in the rat liver: a newly developed radiotracer technique, "TLC-autoradioluminography"

AUTHOR(S): Okuyama, Mitsunobu; Tsunogai, Masanobu; Watanabe, Noriko; Asakura, Yasuyo; Shigematsu, Akiyo

CORPORATE SOURCE: Inst. of Whole Body Metabolism, Chiba, 270-14, Japan

SOURCE: Biol. Pharm. Bull. (1995), 18(11), 1467-71

CODEN: BPBLEO; ISSN: 0918-6158

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A possible evaluation technique was devised for examg. timely cholesterol synthetic activity in the rat liver. The principle of the technique is to measure the incorporation rate of <sup>14</sup>C atoms into a few target metabolites excreted in bile with time after an intraportal injection of [1,2-<sup>14</sup>C]acetate to the conscious rats. The measuring technique, TLC-autoradioluminog. (TLC-ARLG), was devised for much more accurate, quant., simple and quick ultramicroanal. of radioactive metabolites than ever before. Practically, a few .mu.L of the bile samples were analyzed by TLC before recording of a 2-dimensional radioactive image on the TLC plate. The incorporation ratio of <sup>14</sup>C into cholesterol to succinic acid (C/S ratio) varied such that the value found in a 24-h fasting group was less than one-tenth of that in a sufficiently fed control group. For use as an antihyperglycemic drug, the bile C/S ratio in the nicotinic-acid-dosed group was approx. one-fifth of that in the control group.

L4 ANSWER 36 OF 83 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:584006 CAPLUS

DOCUMENT NUMBER: 117:184006

TITLE: Robotic thin layer chromatography instrument for synthetic chemistry

AUTHOR(S): Corkan, L. Andrew; Haynes, Evan; Kline, Steven; Lindsey, Jonathan S.

CORPORATE SOURCE: Dep. Chem., Carnegie Mellon Univ., Pittsburgh, PA, 15213, USA

SOURCE: New Trends Radiopharm. Synth., Qual. Assur., Regul. Control, [Proc. Am. Chem. Soc. Int. Symp.] (1991), Meeting Date 1990, 355-70. Editor(s): Emran, Ali M. Plenum: New York, N. Y.

CODEN: 57XCAV

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The authors constructed a second generation instrument for performing automated thin-layer chromatog. (TLC). The TLC instrument consists of four dedicated stations for (1) plate dispensing, (2) sample application, (3) plate development, and (4) densitometry. A robot is used to move TLC plates among stations. The TLC instrument functions either as a stand-alone unit or as one anal. module in a robotic workstation for synthetic chem. An integrated hardware and software architecture enables automatic TLC anal. of samples produced concurrently from synthetic reactions in progress on the workstation. The combination of fixed automation and robotics gives a throughput of 12 TLC samples per h. From these results a blueprint has emerged for an advanced automated TLC instrument with far greater throughput and anal. capabilities.

L4 ANSWER 41 OF 83 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1990:552355 CAPLUS

DOCUMENT NUMBER: 113:152355

TITLE: Highly accelerated reactions in a microwave oven: synthesis of heterocycles

AUTHOR(S): Bose, Ajay K.; Manhas, Maghar S.; Ghosh, Malay; Raju, Vegeesna S.; Tabei, Keiko; Urbanczyk-Lipkowska, Zofia

CORPORATE SOURCE: Dep. Chem. Chem. Eng., Stevens Inst. Technol., Hoboken, NJ, 07030, USA

SOURCE: Heterocycles (1990), 30(2, Spec. Issue), 471-4

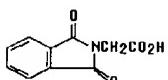
CODEN: HTCYAM; ISSN: 0385-5414

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 113:152355

GI



AB Efficient synthesis of a wide variety of heterocycles on 0.1 to 200 g scale was conducted in org. solvents in a com. microwave oven in a few minutes at a low energy level. E.g., phthalimidoacetic acid (I) was obtained from phthalic anhydride and H<sub>2</sub>NCH<sub>2</sub>CO<sub>2</sub>H on a 100-200 g scale in 5-8 min in a microwave oven. Erlenmeyer flasks were adequate reaction vessels since neither high pressure nor high temp. were involved. Fast monitoring of synthetic reactions was achieved by tlc sepn. and transfer of tlc spot material directly to a solids probe of a chem. ionization mass spectrometer. Microwave Oven-induced Reaction Enhancement (MORE) chem. is not due to thermolysis: one reaction was conducted successfully in a reaction vial encased in a block of ice.

L4 ANSWER 42 OF 83 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1990:520892 CAPLUS

DOCUMENT NUMBER: 113:120892

TITLE: Identification of bicyclic bisureas and by-products from their synthesis by thin-layer chromatography

AUTHOR(S): Kazantseva, O. N.; Berlyand, A. S.; Knizhnik, A. Z.

CORPORATE SOURCE: USSR

SOURCE: Probl. Sovrem. Katal.: Mezhdunar. Konf. Posvyashch. Pamyati Akad.

G.K. Boreskova, Novosibirsk (1989), (Ch. 1), 85-7 From: Ref. Zh., Khim. 1990, Abstr. No. 50347

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Title only translated.

L4 ANSWER 48 OF 83 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:464066 CAPLUS

DOCUMENT NUMBER: 111:64066

TITLE: Thin-layer chromatographic determination of the content of impurities in mebicar

AUTHOR(S): Pavlova, V. M.; Berlyand, A. S.; Zhidkova, A. M.; Kutsyi, M. V.; Knizhnik, A. Z.

CORPORATE SOURCE: Mosk. Med. Stomatol. Inst., Moscow, USSR

SOURCE: Vysokochist. Veshchestva (1989), (3), 181-3

CODEN: VYVEEC; ISSN: 0235-0122

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB A TLC method was developed for the detn. of 1,3-dimethylurea (I) and 1,3-dimethylhydantoin (II) in mebicar dosage forms as synthetic impurities. The method was based on a Silufol plate and CHCl<sub>3</sub>-MeOH (10:1, 8:1, 5:1) mobile phase. A Na nitroprusside soln. was used as developing agent. The detection limit of II was 300 ng. The contents of I and II were .ltoreq.0.005 and .ltoreq.0.03%, resp.

L4 ANSWER 53 OF 83 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:38265 CAPLUS

DOCUMENT NUMBER: 110:38265

TITLE: An integrated first-year laboratory experiment involving synthesis, spectroscopy, and chromatography of metal acetylacetoneates

AUTHOR(S): Glidewell, Christopher; McKechnie, James S.

CORPORATE SOURCE: Univ. St. Andrews, St. Andrews/Fife, KY16 9ST, UK

SOURCE: J. Chem. Educ. (1988), 65(11), 1015-17

CODEN: JCEDA8; ISSN: 0021-9584

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A lab. expt. is described on the prepn. of metal acetylacetoneato complexes by reaction of metal salts with acetylacetone in weakly basic soln. The expt. provides an effective and colorful procedure in which students can develop manipulative skills in synthesis and purifn. The expt. has been

developed into a comprehensive expt. involving synthesis, TLC, and interpretation of both  $^1\text{H}$  and  $^{13}\text{C}$  NMR and mass spectra. The expt. requires students to prep. and purify a sample of 1 complex  $\text{M}(\text{CH}_3\text{COCHCOCH}_3)_n$  selected from a choice of  $\text{Mn}^+ = \text{Al}^{3+}$  (colorless),  $\text{VO}_2^+$  (blue),  $\text{Cr}^{3+}$  (deep maroon),  $\text{Mn}^{3+}$  (green-black),  $\text{Fe}^{3+}$  (red),  $\text{Co}^{3+}$  (dark green), and  $\text{Cu}^{2+}$  (blue-gray).

L4 ANSWER 57 OF 83 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1988:133151 CAPLUS

DOCUMENT NUMBER: 108:133151

TITLE: Determination of free sulfur in vulcanized rubber by thin layer scanning method

AUTHOR(S): Li, Chaolin; Su, Yibing; Zhai, Jianjun; Li, Lijun; Wu, Jingjia

CORPORATE SOURCE: Lanzhou Univ., Lanzhou, Peop. Rep. China

SOURCE: Lanzhou Daxue Xuebao, Ziran Kexueban (1987), 23(3), 127-9

CODEN: LCTHAF; ISSN: 0455-2059

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB Free sulfur in vulcanized rubber was extd. by acetone and analyzed by scanning thin-layer chromatog. using silicon rubber thin-layer plate. The results were in excellent agreement with those obtained by chem. anal.

L4 ANSWER 77 OF 83 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1981:438272 CAPLUS

DOCUMENT NUMBER: 95:38272

TITLE: Quantitative determination of thromboxane synthesis in blood samples by video-densitometry

AUTHOR(S): Jecsai, G.; Bagdany, S.

CORPORATE SOURCE: ChinoIn Biochem. Lab., Budapest Postgrad. Med. Sch., Budapest, Hung.

SOURCE: Acta Biochim. Biophys. Acad. Sci. Hung. (1980), 15(4), 259-61

CODEN: ABBPAP; ISSN: 0001-5253

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A rapid method for detg. the rate of TXB<sub>2</sub> synthesis in blood samples utilizing TLC and video-densitometry is described.

Platelets were sepd. from human blood samples and incubated with arachidonic acid at 37 degree. for 30 min. The acid-sol. lipids were extd. and TXB<sub>2</sub> sepd. from the other lipids on Merk DC-Plastikfolien Kieselgel plates (20 cm .times. 20 cm .times. 0.2 mm). The plates were developed in  $\text{CHCl}_3\text{-MeOH-acetic acid (90:5:5)}$  at room temp. TXB<sub>2</sub> had an Rf value of 0.29. A calibration curve for the quant. detn. of TXB<sub>2</sub> on TLC plates was obtained by video-densitometry. The video signals of TXB<sub>2</sub> were plotted against their concns. and the calibration curve was used to detn. the amt. of TXB<sub>2</sub> synthesized by the platelet fraction. The TXB<sub>2</sub> synthesis rate in several human platelet preps. ranged 28.5-46.1 .mu.g TXB<sub>2</sub>/1010 thrombocytes/h.